

GENERAL MECHANICAL NOTES

FURNISH AND INSTALL A COMPLETE HVAC SYSTEM AS SHOWN ON THE DRAWINGS. THE DRAWINGS INDICATE DIAGNOSTICALLY THE EXTENT, GENERAL CHARACTER AND LOCATIONS OF WORK INCLUDED. DO NOT SCALE DRAWINGS. VERIFY ALL DUCT, 4 PIPE ROUTINGS, EQUIPMENT LOCATIONS AND EXACT DIMENSIONS ON ARCHITECTURAL DRAWINGS OR AT JOBSITE.

ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND CODES PROVIDED IN ASHRAE, ANSI, ASHRAE, NBS, IFMA, SMACNA AND THE 2010 STANDARD MECHANICAL CODE. THE HVAC SUBCONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY FOR ANY QUESTION OR DISCREPANCY IN THE DRAWINGS, OR FOR ANY CHANGE IN EQUIPMENT, MATERIALS OR LOCATION OF SAME IF CHANGED FROM THOSE SHOWN. THESE DRAWINGS ARE FOR PERMITTING PURPOSES ONLY.

ALL ROUND SHEET METAL DUCTWORK SIZES SHOWN ON THE DRAWING ARE OUT TO OUT OF METAL DIMENSIONS. ALL DUCTWORK SHALL BE SUSPENDED AT FOUR FOOT INTERVALS WITH ONE INCH APPROVED HANGING STRAP.

ALL DOUBLE WALL OVAL SHEET METAL DUCTWORK SIZES SHOWN ON THE DRAWING ARE INSIDE OF METAL DIMENSIONS. ALL DUCTWORK SHALL BE SUSPENDED AT FOUR FOOT INTERVALS WITH ONE INCH APPROVED HANGING STRAP. ALL DUCTWORK SHOWN CROSSHATCHED ON DRAWINGS SHALL BE INSULATED INTERNALLY WITH 1" THICK FIBERGLASS FILL W/PERFORATED LINER. ALL BRANCH LINE TAKE-OFFS SHALL BE PROVIDED WITH INTEGRAL SCOOPS AND VOLUME DAMPERS.

ALL RECTANGULAR SHEET METAL DUCTWORK SIZES SHOWN ON THE DRAWING ARE OUT TO OUT OF METAL DIMENSIONS. ALL DUCTWORK SHALL BE SUSPENDED AT FOUR FOOT INTERVALS WITH ONE INCH APPROVED HANGING STRAP. ALL DUCTWORK SHOWN CROSSHATCHED ON DRAWINGS SHALL BE INSULATED EXTERNALLY WITH 2" THICK FIBERGLASS BLANKET INSULATION WITH REINFORCED FOIL FACED VAPOR BARRIER WITH R-6.0 INSTALLED RATING. ALL BRANCH LINE TAKE-OFFS SHALL BE PROVIDED WITH INTEGRAL SCOOPS AND VOLUME DAMPERS.

ALL AIR DISTRIBUTION MODEL NUMBERS SHOWN ON THE DRAWINGS ARE METAL-AIRE. ALL GRILLES AND REGISTERS INSIDE THE BUILDING SHALL BE EXTRUDED ALUMINUM WITH WHITE PAINT FINISH. ALL GRILLES AND REGISTERS OUTSIDE THE BUILDING SHALL BE EXTRUDED ALUMINUM.

ALL FINAL POWER (LINE VOLTAGE) WIRING OF ALL EQUIPMENT SHALL BE DONE BY THE ELECTRICAL SUBCONTRACTOR. THE CONTROLS AND CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. THERMOSTATS SHALL BE SUPPLIED BY THE UNIT MANUFACTURER, WITH LOCKING COVER AND SOLID METAL BASE.

ALL CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC SIZED IN STRICT ADHERENCE TO MANUFACTURER'S SPECIFICATIONS. ALL PIPING SHALL BE RUN FULL SIZE FROM THE UNIT TO PLANTING AREA.

UPON COMPLETION OF WORK THE CONTRACTOR SHALL INCLUDE START-UP OF ALL SYSTEMS, FURNISHING AN OPERATION AND MAINTENANCE MANUAL AND WALK THRU INSTRUCTIONS TO THE OWNER. THE CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY ON ALL LABOR AND EQUIPMENT, COMMENCING UPON THE DATE OF APPROVAL BY THE OWNER. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ONE COPY OF THE TEST AND BALANCE REPORT SHOWING THE RESULTS OF BALANCING OF AIR QUANTITIES TO PLAN SPECIFICATIONS.

PRIOR TO COMMENCEMENT OF WORK THE MECHANICAL CONTRACTOR SHALL PROVIDE FIVE (5) SETS OF SUBMITTALS OF ALL EQUIPMENT AND MATERIALS REQUIRED ON THIS PROJECT, TO THE ARCHITECT FOR APPROVAL. UPON COMPLETION OF THE JOB THE MECHANICAL CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH A COMPLETE SET OF REPRODUCIBLE AS-BUILT TRACINGS. IF THE CONTRACTOR CHOOSES TO USE EQUIPMENT EQUAL TO THE SPECIFIED EQUIPMENT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT SUCH EQUIPMENT NOT ONLY MEETS SPECS BUT ALSO SATISFIES THE SPACE LIMITATIONS.

SPLIT DX AIR CONDITIONING UNIT SCHEDULE

UNIT DESIGNATION		* AC-1 & AC-2	* AC-3	* AC-4
1. CONDENSING UNIT DATA				
a. MANUFACTURER		CARRIER	CARRIER	DAIKIN
b. MODEL NUMBER		48GAG024	48GAG036	48GAG036NA
c. COMPRESSOR MOTOR	AMPS	9.8	15.5	12.0
d. CONDENSER FAN CAPACITY	CFM	840/1120	840/1120	-
e. CONDENSER FAN MOTOR	AMPS	0.8	1.5	-
f. ELECTRICAL CHARACTERISTICS		208V1/60C	208V1/60C	208V1/60C
2. AIR HANDLER UNIT DATA				
a. MANUFACTURER		" CARRIER	" CARRIER	DAIKIN
b. MODEL NUMBER		38CORR018	38CORR036	38CORR036NA
c. TOTAL AIR CIRCULATED	CFM	480	840	300
d. FRESH AIR QUANTITY	CFM	40	130	-
e. EXTERNAL STATIC PRESSURE	IN H2O	-	-	1.0
f. COOLING COIL FACE AREA	SQ FT	220	260	-
g. FAN SPEED & DRIVE TYPE	RPM	VARIABLE - DIRECT	VARIABLE - DIRECT	VARIABLE - DIRECT
h. FAN MOTOR	AMPS	0.5	1.3	1.0
i. ELECTRIC HEAT SIZE #208V1*	KW	2.0	3.0	-
j. ELECTRICAL CHARACTERISTICS		208V1/60C	208V1/60C	208V1/60C
3. DESIGN DATA				
a. UNIT TOTAL COOLING CAPACITY	BTUH	11,000	33,000	9,000
b. UNIT TOTAL SENSIBLE CAPACITY	BTUH	12,750	24,000	6,750
c. OUTDOOR SUMMER DESIGN TEMPERATURE	* F	96°db 80°wb	96°db 80°wb	96°db 80°wb
d. INDOOR SUMMER DESIGN TEMPERATURE	* F	78°db 65.5°wb	78°db 65.5°wb	78°db 65.5°wb
e. OUTDOOR WINTER DESIGN TEMPERATURE	* F	38°	38°	38°
f. INDOOR WINTER DESIGN TEMPERATURE	* F	72°	72°	72°
g. UNIT EFFICIENCY	SEER	13.0	13.0	21.0

- * PROVIDE ALL ACCESSORIES REQUIRED FOR LOW-AMBIENT TEMPERATURE CONTROL.
- ** PROVIDE FRESH AIR INTAKE KIT.

* OUTSIDE AIR REQUIREMENT

OCCUPANCY	AREA (SF) EFFECTIVE	CFM/SF	PEOPLE	CFM/PERSON	TOTAL CFM	CFM REQUIRED	CFM SUPPLIED
OFFICE	680	0.6	7	5	76	76	80
GYM	416	0.6	10	10	129	129	130

* PER 2010 FBC 403.3.

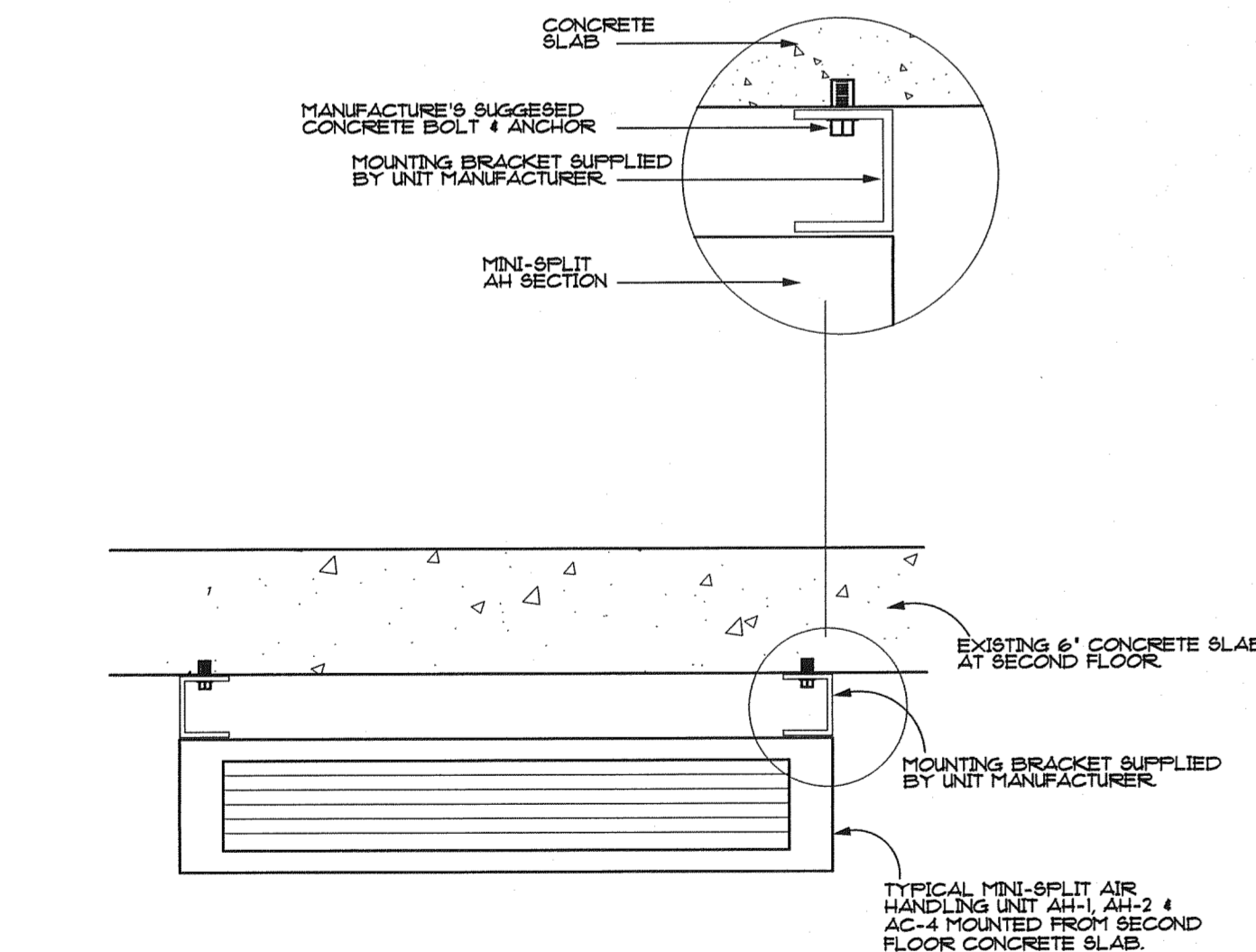
EXHAUST FAN SCHEDULE

1. FAN DESIGNATION		EF-1
2. MANUFACTURER		GREENHECK
3. MODEL NUMBER		SP-A 110
4. FAN CAPACITY	CFM	50
5. TOTAL STATIC PRESSURE	IN H2O	.25
6. FAN SPEED & DRIVE TYPE	RPM	950 DIRECT
7. FAN MOTOR SPEED	RPM	540
8. FAN MOTOR	HP	.45 WATTS
9. ELECTRICAL CHARACTERISTICS		120V1/60C
10. FAN TYPE		CEILING - IN-LINE
11. PREFABRICATED ROOF CURB	ALUM	MODEL EL-10X3
12. MINIMUM WHEEL DIAMETER	IN	-

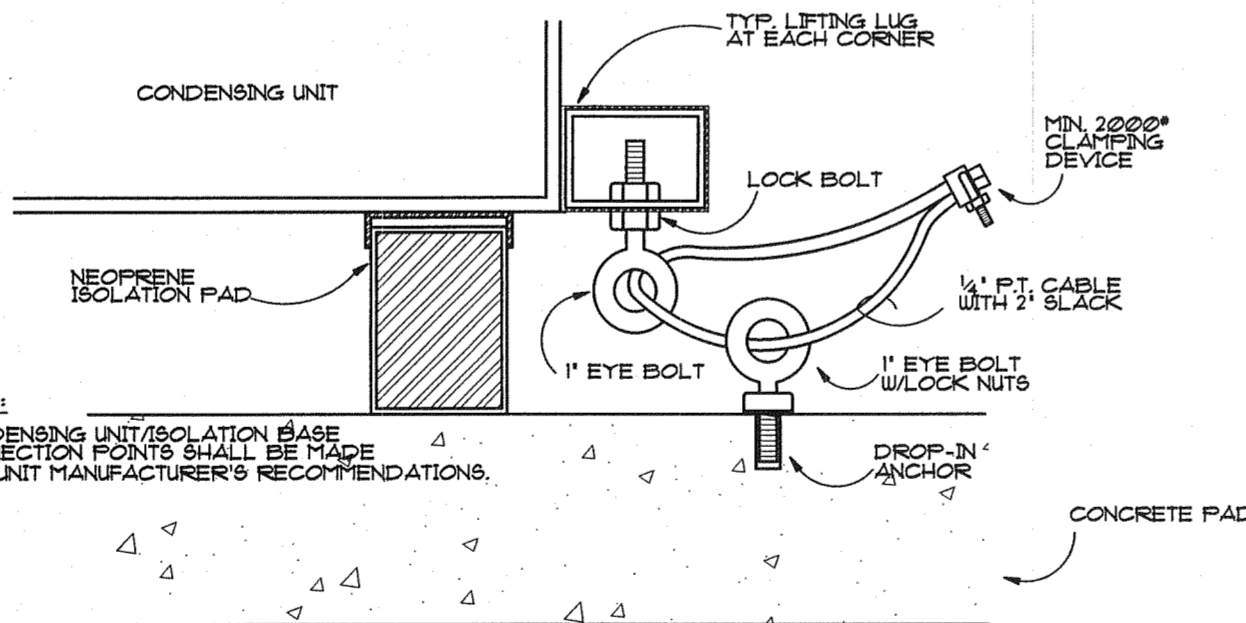
- * PROVIDE SOLID STATE SPEED CONTROL DEVICE IN FAN HOUSING AND VIBRATION ISOLATOR KIT

LEGEND

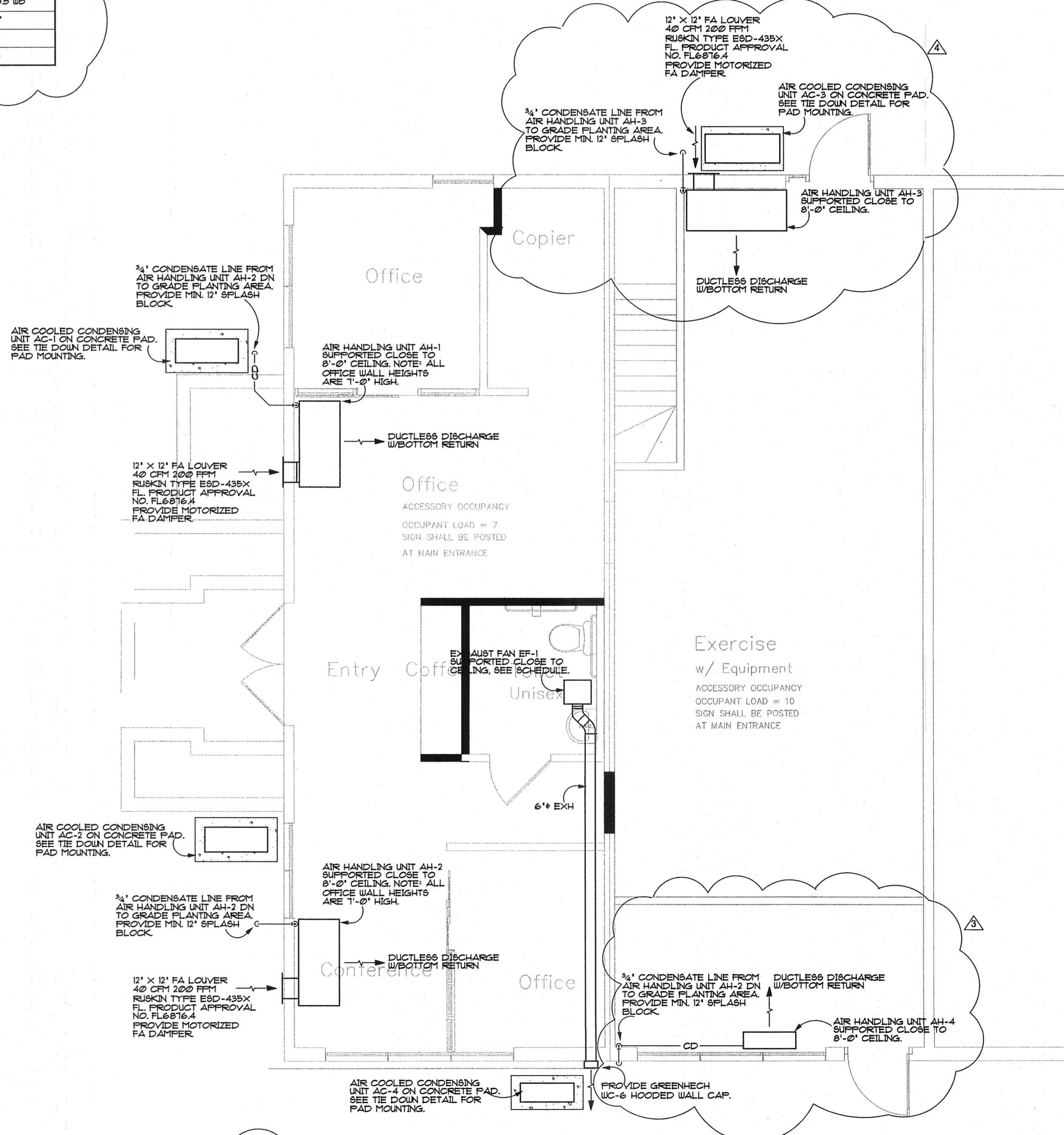
SA	SUPPLY AIR
RA	RETURN AIR
FA	FRESH AIR
EXH	EXHAUST AIR
GR	GRILLE
REG	REGISTER
VD	VOLUME DAMPER
SD	SPLITTER DAMPER
MD	MULTI-LOWER DAMPER
QR	QUADRANT REGULATOR
①	ROOM THERMOSTAT 5'-0" ABV FN FL
②	DUCT MOUNTED SMOKE DETECTOR
③	DUCTWORK W/1" INTERNAL INSULATION
④	DUCTWORK W/2" INTERNAL INSULATION



AIR HANDLING UNIT AH-1, AH-2 & AC-4 MOUNTING DETAIL



HURRICANE ANCHORING FOR PAD MOUNTED CONDENSING UNITS.



MECHANICAL FIRST FLOOR PLAN
SCALE 1/4" = 1' - 0"

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11/17/14
01/08/15

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Mechanical Plans

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